

Beyond the walls - The impact of urban sprawl on the fortifications in Albania

Marsela Plyku Demaj^a, Joli Mitrojorgji^b, Klodjana Gjata^c

^aPolis University, Tirana, Albania, marsela_demaj@universitetipolis.edu.al, ^bNational Institute for Cultural Heritage, Tirana, Albania, jolimitrojorgji@gmail.com, ^cFreelance professional, Tirana, Albania klodjanagjata@gmail.com

Abstract

The need for protection of human settlements has existed since the earliest times of human society. It is reflected in the choice of the terrain, strategic location and through the construction of castles and fortification walls to protect the life inside the settlement. Being interdependent to the human settlement that they aim to protect, fortifications, apart from reflecting the building and military techniques of the time, are also a significant indicator of the life and extent of the historic built settlement within the walls, its accessibility, main transportation routes, etc.

In Albania, fortifications, based on a classification on typology, function, building techniques, among others, are one of the first architectural genre designated as monuments of culture in the first national List of Cultural Monuments back in 1948. When in urban areas, these elements often constituted the core of the settlement. As such, they are permanent urban nodes in times of growth, development and change during the centuries and often conditioning/determining the growth policies around them. In present days, many only preserve traces of the protective structures and the walls and few still continue to host living neighborhoods within the perimeter.

This article focuses on the fortifications in urban areas linked to historic settlements and impacted from the urban sprawl through history or currently due to urban development pressures.

How do these permanent features of the city face urban growth, offering a categorization of the impacts being: building within, out or close to the encirclement of walls, or even the impact on the traditional landscape? By displaying a detailed view of the nature and range of impacts the study aims at helping national and local authorities dealing with cultural heritage, to undertake informed decisions for the protection and management of cultural heritage facing risk or loss of cultural values, and to be able to produce contemporary urban landscapes where historical layers combine.

Keywords: fortification, urban sprawl, urban development, historical landscapes, buffer zone.

1. Introduction

The need for protection of human settlements has existed since the earliest times of human society. It is reflected in the choice of the terrain, strategic location and through the construction of castles and fortification walls to protect the life inside the settlements.

When in urban areas, these historic fortified structures often constitute the core of the settlement. As such, they are permanent urban nodes in times of growth, development and change during the centuries, often conditioning the growth policies around them. In present days, many only preserve traces of the protective

structures and the walls, and few continue to host living neighbourhoods within their perimeter.

This article focuses on the fortifications in urban areas linked to historic settlements and impacted from the urban sprawl through history or currently due to urban development pressures. How do these permanent features of the city face urban growth, offering a categorization of the impacts being: building within, out or close to the encirclement of walls, or even the impact on the traditional landscape? By displaying a detailed view of the nature and range of impacts the study aims at helping national and local authorities dealing with cultural heritage, to undertake informed decisions for the protection and management of cultural heritage facing risk or loss of cultural values, and to be able to produce contemporary urban landscapes where historical layers combine. Cultural heritage planning should not simply be an instrument of protection against change; is the understanding and management of change according to the decision on the nature, quality and pace of this change.

1.1. Conceptual framework – Urban Sprawl

In 1915, Geddes published his book *Cities in Evolution* where he drew attention to the fact that the new neotechnic technologies electric power, the internal combustion engine – were already causing the great cities to disperse and thus to conglomerate: *“Some name, then, for these city-regions, these town aggregates, is wanted. Constellations we cannot call them; conglomerations is, alas! nearer the mark, at present, but it may sound unappreciative; what of ‘Conurbations?’”* (Geddes 1915, p.34 – cited in Hall, P., 2014).

2. Methodology of the research

The impact of urban development will be analysed through a philological reading of the space of 18 case studies (see Note 1), emphasizing the transformations over time and the current state of the space in and around the fortification walls. The present research relies in an analysis composed of two main elements:

1. Historic research - How the fortification walls have faced urban growth, is investigated taking into consideration changes in their immediate context in different historic periods.

2. Spatial analysis is conducted mainly based on juxtaposition and comparison of maps of different periods as well as based on observations in field comparing to historic photos or aerial photos of the different case studies.

3. Historical background

Located between the East and the West of the continent, Albania has played a crucial role as a custodian of culture, a connecting bridge for different nations, as well as a backdrop for dramatic clashes. Based on (Prendi 1972), the urban evolution of Albania as an integral part of the contemporary urbanization process has generally represented a widespread, relatively developed and archaeologically proven phenomenon, more than two thousand years old. The romans, upon their occupation of Albanian territory encountered numerous castles and fortified cities built in hill tops and high terrains.

(Karaiskaj, 2021) states that the construction of fortified cities in flat terrains started for the first time in 3rd-4th century during Diocletian rule as part of the many reforms that he undertook. They were mainly built in strategic points and crossroads of important military and commercial function. Still they were not considered as significant as the Illyrian and Epirote castles and fortified settlements. In the last decades of the 4th century when Gots found their way towards the Balcans, a massive relocation of people caused the abandonment of the settlements located in the lower and flat terrains towards the old Illyrian fortifications on hilly tops and high terrains, which required the construction of new fortifications and reconstruction of existing ones.

In the course of history, these places have been witness to many wars, causing several cities that had once flourished in antiquity or late antiquity to deteriorate into rural outposts or fortifications used by foreign occupiers by the late 15th century (Miho, 2003). Hence, the revival of these diminished settlements commenced, particularly in close proximity to their fortifications (such as Kruja and Lezha) and in the vicinity of places like Shkodra, Berat, and Gjirokastër, primarily for defensive reasons. Over time, these areas saw the gradual establishment of ateliers, stores, taverns, administrative offices, and military personnel.

3.1. Fortifications as significant part of Albanian historic heritage, policies for their protection

The first national List of designated cultural heritage monuments was adopted in 1948², and comprised of 92 entries, about 40 (forty) of which represented the genre of fortifications. It is important to highlight the awareness that a new state recently recovering from the 2nd WW had towards the protection of its historic and cultural heritage. Moreover, the importance of the context (immediate surrounding) was noted as the listed monuments have been designated together with a specific buffer zone (protected area) surrounding them.

Aiming to protect these monuments from the impact of potential new constructions, these buffer zones mainly consisted in establishing a standard critical distance from the exterior fortification walls ex. 5 m up to 10 m distance from the walls³ or in several other cases are established as zones based on natural borders such as river, water sources, slopes, viewpoints etc.⁴ In cases when the fortifications are part of dense urban layouts such as in Durrës, Elbasan, Peqin etc., only roads that confined the castles were considered as the minimal buffer area.

Indeed, the designation of this genre as cultural monuments together with their buffer areas, brought new challenges and responsibilities. Even though driven from well accepted general principles such as protection of the surrounding landscape and preservation of the viewpoints from the monument and towards it, the definition of buffer zones do not rely on specific established criteria and do not take in consideration the different nature of the context surrounding the fortifications which sometimes may be natural landscape and sometimes may be built urban areas.

Currently this genre is present in almost all the regions in Albania. There are about 208 entries belonging to the genre of fortifications in the National List of Tangible Cultural Heritage, comprising about 16% of the total number of designated 1st category monuments.

3.2. Typologies, constructions techniques, periods, function

There are six main typologies based on their function being (1) strategic fortifications, (2)

fortified settlements (3) ancient cities (4) refuge forts, (5) castles and (6) separate fortification walls.

For the purpose of this paper, the case studies were chosen among three of these typologies, being: (2) fortified settlements, (3) ancient cities and (5) castles situated in urban areas.

The most encountered form of fortifications are those constructed with stone masonry, the most ancient of which consist in masonry composed by large Cyclops stone blocks put together without mortar.

Karaiskaj, 2015 offers an extensive classification of fortifications based on their dating in reference to the technological developments in the military field. So, the construction of fortifications was based on the requirements of the time for protection based on the available military technology.

4. Urban Sprawl in Albania

Faja 2010 states that urbanism serves as the creator and official custodian of urban spaces, regardless of their location. He further notes that after the 1990s, the emerging society needed a new approach to urban planning and architectural governance.

Two of the defining experiences of Albanians in the last 30 years have been the opening of the economy to the private sector and the spatial displacement of the population. Some of the major consequences of these immediate political, economic and social changes have been the increase in demand for urban land for housing and business as well as radical changes in the use of space inside and outside urban areas.

During this time, authorities faced challenges in establishing democratic urban planning principles, crafting new rules, codes, and laws, and developing a fresh aesthetic theory. Existing tools for city planning had become outdated, leading to difficulties in meeting increased demands for housing, jobs, and services driven by the evolving market economy. Urbanism and architecture took on more informal and unregulated characteristics, signifying the start of urban transformation. The central government struggled to manage the rapid city expansion in the 1990s. (Faja,2010) The most recent general plans of main cities (in 1989)

were driven from centralized principles of a different regime and were not sufficient to meet the new and never heard needs (up to that moment) for private enterprises, housing units or socio-cultural activities. Even though decentralisation started to some extent since after the '90s, with the territorial reform in 2014, most responsibilities for urban planning and territorial management have been formally transferred to local governments, most of which have faced difficulties with lack of the human and financial resources needed to meet all the challenges.

These were reflected in the territory in the form of uncontrolled urbanization, the occupation of public spaces, high-density, high-rise buildings in urban centres and informal suburbs, and the creation of new urban areas with significant infrastructure deficiencies. Referring to these phenomena within the urbanization panorama in Albania, Bertaud 2006 states that *“Urbanization in Albania has gone through three distinct phases since the fall of communism. The first phase was dominated by the informal sector. The second phase saw the consolidation of the informal sector and the emergence of a formal sector. The third phase, starting in 2006, consists in the consolidation of the formal sector and the regularization of the informal sector. The main government objective during this third phase would be to formalize the operation of the real estate sector.”*

It was particularly in the empty and available spaces that in many times were found around the historic areas including fortifications that this phenomenon of informal building appeared.

4.1. Vulnerabilities of historical fortifications to urban sprawl

Vulnerabilities and risks posed to fortifications due to urban sprawl may be grouped in two main types being (1) negative impact on their landscape and (2) risks posed towards the structural stability of the constructions.

4.1.1. Negative impact on their landscape.

Fortifications, strategically positioned in natural landscapes, serve as the origins of modern settlements. They seamlessly blend with the surrounding natural features. Alterations to these historic urban layouts and architectural elements can undermine their historical

character and the reflection of local inhabitants lifestyles and governance.

4.1.2. Risks posed to structural stability of the constructions.

Fortifications built on hilltops or slopes are susceptible to changes in the natural terrain below. Neglecting this aspect, like tree removal or construction without considering landslide or erosion risks, can make these fortifications vulnerable. For instance, the Castle of Lezha suffered damage due to tree removal causing terrain instability, and the Castle of Borsh is currently at risk due to landslide emergencies.

4.2. Impact of urban sprawl to fortifications in Albania – Case studies

Based on the selected case studies, impacts may be categorized in three main groups being:

1. New buildings within the encirclement of walls, transforming as such the architectural and urban character of the the historic urban settlement within the walls. This group may be represented by castles that have an historical continuity of being inhabited. The presence of residential buildings within the encirclement of walls is accompanied by the natural pressure for enlargement and / or change of the architectural character. Castles of Elbasan, Durrës, Ishmi, Tepelena, Kanina, Kruja etc. are representatives of this group:

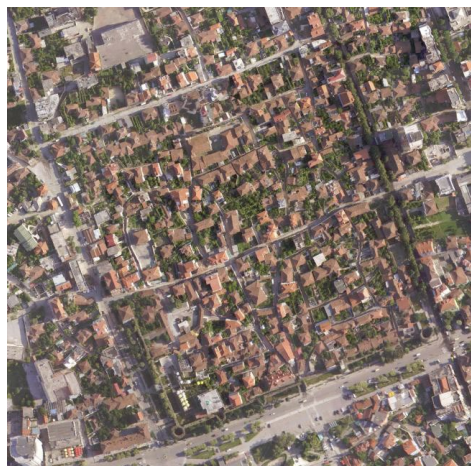


Fig. 1- Orthofoto – Castle of Elbasan

1.a. Castle of Elbasan

Dated in 2nd-1st cent b.C. with distinct phases from the roman period 3rd-4th cent, byzantine period 6th cent and ottoman period 15th cent. It has continuously been inhabited.

Due to the fact that it included a relatively compact urban layout (fig. 1), as well as surrounded by a dense urban layout it has been subject to pressures from either within the encirclement of walls as well as in the vicinity.

Castle of Elbasan can be mentioned as one of the worst cases of poor management of the new construction pressure within the historic settlements inside the walls. Even though having a regulation and restrictions posed to new construction due to its archaeological interest, during 1990-today, a large number of interventions managed to be realized. Many of these interventions have unfortunately posed a high risk towards the loss of the traditional character of residential building mainly representing 18-20th century.

1.b Castle of Durrës

Durrës is one of the oldest towns in Albania. Continuously inhabited from the ancient period, it marked also the entrance point in Albanian territory, of the ancient road Egnatia linking Rome to Constantinopolis. The fortification walls date from different periods from ancient, late antiquity, byzantine, venetian, ottoman.

Being continuously inhabited, the settlement within the castle walls has been characterised by both a medieval (18-19th cent) character with particular examples that were built close to or leaning to the castle walls (fig.3), as well as a strong character pertaining to early 20th cent. Linked to the italian plan and interventions in 1934-1937. Fig. 2 shows the dynamics of development pressures posed to the south-eastern tract of fortification wall from both within the historic urban settlement as well as from the close proximity in the exterior.

Buka et.al 2023, together with highlighting the importance of the main axis of Epidamn boulevard as a continuing element shaping the urban character of the city, also noted numerous interventions mainly consisting in volume enlargement and facade interventions on the 20th cent. buildings along this boulevard.

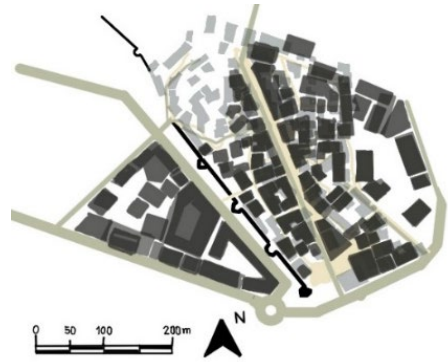


Fig. 2- Figure-ground diagram – southeastern tract of the Castle of Durrës showing a superimposition of constructions layers in three historic phases being 1928 (light grey), 2007 (grey), 2018 (dark grey)



Fig. 3- Photo - Castle of Durrës showing buildings adjacent to the fortification wall (source: M.D.Demaj, 2015)

1.c Castle of Ishmi

It is a small castle in the top of the hill close to the village of Ishmi, dating back to 1572-1574. Negative impacts are posed to the structure of the fortification walls due to the leaning of several buildings (probably constructed during the communist period) which have had in the last 10 years expansion in volume and widening in plan. (fig.4)

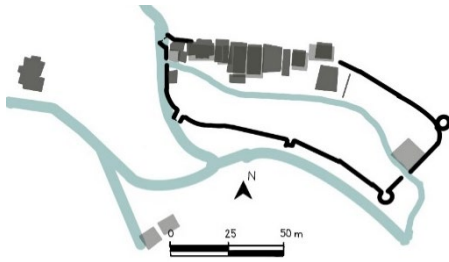


Fig.4- Figure-ground diagram – Castle of Ishmi showing a superimposition of constructions layers in two phases being 2007 (light grey), 2018 (dark grey)

A specific subgroup within this group, which needs to be mentioned is the group of fortifications that include a commercial activity (bar/restaurant etc.) in one of the fortification structures (towers). Such interventions were introduced by the Institute of Cultural Monuments in 2000 aiming at the adaptive reuse of some monuments of this genre. Today these type of usages need to be controlled and probably reformulated since they may be subject to pressures of expansion within and outside of the walls. Examples of this subgroup include Castle of Petrela, Castle of Preza, Castle of Shkodra, Castle of Lëkursi etc.

2. Building adjacent to or close to the encirclement of walls towards their exterior.

This group is represented by fortifications that have a strong archaeological character and do not conserve erected buildings within the walls but due to being within urban settings or in particular touristic sites, are impacted by the development pressure from outside.

Representative selected examples include Castle of Preza, Castle of Peqin (fig.5), Castle of Lezha, Castle of Saranda, Castle of Tirana, castle of Portopalerma etc.:

2.a. Castle of Peqin

The castle of Peqin dates back to the 15th cent. It had originally a military function, later inhabited for a short period and subsequently abandoned. It is located very close to the city centre, but actually not directly visible from the centre due to a line of buildings constructed mainly during the communist period that disregarded the alignment of the plan or viewpoints towards and from the castle. Due to pressures, the municipality of Peqin requested the designation of a buffer zone around

the castle, further adopted by the Institute of Cultural Monuments in 2012. Still, currently there are several buildings constructed adjacent to the fortification wall (Fig.5)



Fig. 5- Aerial photo - Castle of Peqin (source: Asig geoportal 2018 orthophoto)

3. Building in the buffer zone or close hinterland of the fortification walls having an impact on the traditional landscape that surrounded the fortification.

This group is represented by fortifications that are located in dominant locations such as hilltops and are surrounded by urban settings, such as Castle of Kruja, Castle of Berat, Castle of Gjirokastra, Castle of Kanina, Castle of Libohova (fig.7), Castle of Drishti:



Fig. 6- Aerial photo - Castle of Libohova (source: <https://www.facebook.com/arkeo.al/posts/118095723453135/>)

3.a Castle of Libohova

It is one of many fortifications linked to Ali Pasha Tepelena who is noted to have undertaken its construction at the end of 18th century, dedicating it to his sister Shanisha.

Situated at a dominant spot over the city of Libohova, it is now facing pressures of negative impact in its landscape due to the sprawl of built areas towards the direction of the fortification walls both from the slopes as well as from the hilltop. (fig.6)

3.b Castle of Berat

Pressures posed to the Castle of Berat (dated back to 4th cent. b.C. and uninterruptedly inhabited since then) are mainly due to building in the buffer zone in northern and northeastern side, causing negative impact in its landscape. The lack of specific technical guidelines aiming at the preservation of the character of the urban setting of the historic centre indirectly enables building in all kinds of architectural languages consisting in a cacophony of styles which causes a negative impact. Fig.7 and 8 show the change in the natural setting of the castle.



Fig. 7- Photo of the north-western side of the castle of Berat (1960s) showing the hillside free from buildings and vegetation. *source: Technical Archive, National Institute for Cultural Heritage*



Fig. 8- Photo of the north-western side of the castle of Berat (today) source M.P. Demaj

3.b Castle of Kruja

Dating back as a settlement to the third century B.C., evidence shows that the fortress was constructed during the fifth-sixth centuries. The Castle of Kruja represents the most striking

example of development pressures having negative impact to the surrounding landscape of the fortification. Fig.9 and 10 display the huge change on the organization role of the dominant location of the Castle of Kruja in respect to the urban centre.



Fig. 9- Castle of Kruja - Sketch Edward Lear 1848



Fig.10- Castle of Kruja today – source M.P. Demaj, 2021

5. Conclusions and Recommendations

Based on the categorization of impacts pertaining to visual risks posed to the landscape or to risks posed to the structural component of the fortifications several conclusions and a series of recommendations can be drawn:

1. For the 1st and 3rd groups. Specific technical preservation guidelines should be considered to be developed for either historic settlements within the fortifications as well as for the urban settlements in proximity of an historic fortification. Such guidelines are indicative, non-binding documents that aim for the preservation of the urban identity of the historic neighborhoods. The application of these guidelines must be aligned with the planning documents such as master plan. The technical elements that may be covered are: building volumes (geometry of the façade, alignment of

facades, width, elevations) facades (proportion of openings, materials, and features of doors and windows) roofing (slope, roofing materials, gutter materials etc.).

2. For all groups: The introduction and usage of the 2011 Historic Urban Landscape Recommendation is highly stressed in this point. The HUL approach sees the city as a multi-layered structure in time and space. This layering includes a site's topography, geomorphology, hydrology, built environment, infrastructures above and below the ground, open spaces and gardens, its spatial organization and visual relationships.

3. For all groups: Buffer areas of the historic monuments (in this case fortifications) should not be designed as one solution fits all, but should carefully planned guided by a values based approach. So values and attributes of fortifications constituting the arguments for designation as "historic monuments" should be

identified and used as guiding tools in the process of buffer zone definition for each monument.

Notes

(1) 18 case studies, among the overall list of fortifications, consisting mainly in fortifications of ancient and medieval settlements, were selected for analysis.

(2) Decision of the Institute of Sciences based on Law No.586, 17.08.1948 and published in the Official Gazette No.95/48, 19 10.1948.

(3) Case of the Castle of Berat (10 m), Castle of Kanina (10 m), Castle of Gjirokastra (10 m).

(4) Case of the Castle of Shkodra “..up to quota 172 m including the ancient walls confined from the street by the street that leads to Varosh, from the east by the hill neck, from the sud-ovest with the first houses of the city.”

References

- Adhami, S., (1971) Gjurmime rreth themelimit dhe rindërtimeve kryesore të Kalasë së Krujës; Monumentet 1, f.87-101
- Arkeo.al (2019) *Kalaja e Ishmit* available at: https://www.facebook.com/arkeo.al/videos/kalaja-e-ishmit-ish%C3%ABm-castleish%C3%ABmalbaniafacebook-arkeoalinstagramarkeo_alyoutube/972991509962984/ (Accessed: 5 October 2023)
- Bertaud, A. (2006) Urban Development in Albania: The success story of the informal sector.
- Buka, I – Plyku Demaj, M – Kumaraku, Ll., (2023) Exploring the dialectic between permanence and change -The case of Epidamn Bulevard in Durrës, *In international conference on Issues of Housing, Planning, and Resilient Development of the Territory Towards Euro-Mediterranean Perspectives*, Tiranë
- Faja, E (2010). Chief Architect institution in Tirana. *In: Faja, E., Kush e drejton urbanistikën shqiptare*, Tiranë, UFO University press, pp.22-23.
- Hall, P. (2014), The cities of tomorrow – an intellectual History of Urban Planning and Design since 1880 fourth edition, Wiley Blackwell,
- Karaiskaj, Gj., Baçe, A. (1975) Kalaja e Durrësit dhe fortifikimet përreth në antikitetin e vonë, Monumentet 9;
- Karaiskaj, Gj. (1978) Këshjtjella e Ishmit, Monumentet, 15-16
- Karaiskaj, Gj. (2005) 5000 vjet fortifikime në Shqipëri, Tirana, Pegi
- Karaiskaj, Gj (2022) Fortifikimet e antikitetit të vonë dhe mesjetës në Shqipëri, Tirana, Berk
- Miho, K. (2003) Shqipëria, Vështrim Urbanistik (1912-1944), Tirana,
- Plyku Demaj, M., Çuku, R., (2022) Exploring reconciliation of conservation and development through a values-based approach in territorial planning. The case of the old bazaar of Kruja as urban landscape, *In IX AACCP, Chronicles of ever-changing cityscapes*,
- Prendi, F. (1972). Urbanistika në Iliri. *In: Kuvendi I-rë i Studimeve Ilire*. Tirana, pp. 22-30.
- Papajani, L., (1975) Kalaja e Peqinit, Monumentet 9